

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9875,9876,9877,9878 /Lab/153/2021-22 Dated: 13/ 07/2021. **Laboratory:** Bicholim

Sand –T: 5172,5173. Cement-1275

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub:- Urgent reinstatement of the breached canal portion including improvement and strengthening works for RBMC of TIP at chainage 12.500kms. at village Kasarvornem in Pernem Taluka.

Ref to requisition No: F.366/SDI/WDVII/WRD/2021-22/61 Dated: 21/06/2021.

Qty. Received: 1 bags each **Date of Receipt:** 02/07/2021 **Tested on:** 03,05,06/07/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 6741,6742,6743,6744,6773,6774,6762/SS **Lab. Sample No.:** 2040 to 2046 **Tested by:** Mrs. Shirodkar.JE.

12.5mm size aggrt., Cement

R E P O R T 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
2.	12.5 mm Size Aggregate: (L.S.No.2040,2042)	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
4.	12.5 mm Size Aggregate: (L.S.No.2041,2043)	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
5.	Sand: (L.S.No.2044)	i) Silt & Clay by S.A. method : -	5.00%		
		ii) Silt by sedimentation : -	5.55%		
		iii) Fineness Modulus : -	2.30%		
		iv) Grading Zone : -	II		
REMARK: The observed results are within the permissible limits of the coarse sand.					

Junior Engineer

Assistant Engineer

R E P O R T 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
6.	Sand: (L.S.No.2045)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 5.20% : - 2.33% : - II		REMARK: The observed results are within the permissible limits of the coarse sand.
7.	Cement: Jyoti Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W/M- Invisible Year'2021. CM/L =6894808 Qty. rep. – To be used for – -----.		i) Fineness of Cement : 1.19% ii) Consistency of cement : 31.00% iii) Initial Setting Time : 185 minutes iv) Final Setting Time : 330 minutes	----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes)	REMARK: The observed results are within the permissible limit for Ordinary Portland cement.

- Copy to: 1. The Assistant Engineer, SDI, WDVII, WRD, Dhargal-Pernem – Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, W.D.VII, WRD, Dhargal-Pernem – Goa
4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer